DEVOTED TO AGRICULTURE AND ALL ITS KINDRED ARTS AND SCIENCES.

Agriculture not only gives riches to a nation, but the only riches she can call her own.—JOHNSON.

VOL. II. SATURDAY, DECEMBER 7, 1850. NO. 25.

S. W. COLE, EDITOR. QUINCY HALL, BOSTON. J. NOURSE, PROPRIETOR.

THE WORLD'S INDUSTRIAL SHOW.

THIS grand exhibition, which will commence at London, May 1, 1851, is attracting great attention; and well it may, for it will doubtless far excel every thing of the kind that has ever taken place. The cost of the building for the exhibition is about three quarters of a million of dollars.

The governors of the several states have appointed committees to correspond with the *Central Authority* in the city of Washington, and to make arrangements to enable agriculturists, manufacturers, mechanics, and artists, to exhibit specimens of their products.

The Central Authority has made arrangements with government to forward to London articles for this show, and to return, if desired, at the close of the exhibition, free of all charges for transportation.

Messrs. John J. Nicholson, Beesley, & Co., Lower James Street, London, have offered to enter and pass through the custom-house all foreign goods intended for exhibition, without any charge.

All cost of drayage in Boston, or other place in this country, where the goods are deposited, must be paid by the contributors.

The following committee have been appointed for this state: Hon. Marshall P. Wilder, chairman; and to facilitate the despatch of goods, the committee have been divided, so that one or more members will inspect such goods as may be prepared in each congressional district of the state, as follows: —

No. 1. Henry N. Hooper and Erastus P. Bigelow, Esqrs., Boston.

No. 2. Hon. John Aikin, Andover.

No. 3. William A. Burke, Lowell.

No. 4. William Riddle, Esq., Charlestown.

No. 5. Hon. Alexander De Witt, Oxford.

No. 6. Charles Stearns, Esq., Springfield.

No. 7. David Carson, Esq., Dalton.

No. 8. Hon. Marshall P. Wilder, Dorchester.

Nos. 9 and 10. Hon. Samuel L. Crocker, Taunton.

All articles for exhibition from this state must be deposited in this city by January 10; and persons intending to contribute articles must state the area required in superficial feet, and the average height for their goods, on or before the 10th of December.

No goods will be forwarded unless first approved by the committee of the district from which they come; or contributors may exhibit their articles to the full committee in Boston, before packing for shipment.

Correspondence with the full committee should be addressed "To the Massachusetts Committee on the Industrial Exhibition." Henry N. Hooper, secretary, Boston.

REGULATIONS BY THE COMMISSIONERS IN LONDON.

1. The exhibition is to be opened in Hyde Park, London, on the 1st day of May, 1851. The building, constructed chiefly of cast iron and plate glass, 1848 feet long, 408 feet wide, and 108 feet high, with a machinery room 936 feet long and 48 feet wide, will be nearly fire-proof.

2. Goods will be received between the 1st of January and the 1st of March, 1851. After the latter day, none can be received.

3. The productions of all nations will be exhibited under one general classification.

4. Articles exhibited will be divided into four sections, namely: 1st. Raw materials and produce; 2d. Machinery; 3d. Manufactures; 4th. Sculpture, models, and plastic art.

5. Exhibiters will deliver their goods, at their own charge and risk, at the building in Hyde Park.

6. Articles liable to perish during the period of eight months, from the 1st of January to the 1st of September, are not suitable to be exhibited. This applies more particularly to certain articles derived from the animal and vegetable kingdoms.

7. Exhibiters will be at the cost of their own insurance. Glass cases, when required, must be furnished by the exhibiter.

8. Any exhibiter may, by permission of the royal commissioners, employ a servant to keep in order and explain the articles which he exhibits, but not to invite purchasers.

9. Prices are not to be affixed to the articles exhibited, but may, at the option of the exhibiter, be stated in the invoice sent to the royal commissioners.

10. No articles of foreign manufacture can be admitted for exhibition, unless they come with the express sanction of the Central Authority of the country of which they are the produce.

11. Goods will be admitted without payment of duty, and sealed with the official seal of the board of customs till their arrival at the building; but bonds will be required of the owner or agents for the payment of duties in case they should be sold in

England after the exhibition is over. No goods can be removed until the exhibition is finally closed.

12. The rules of awarding prizes will conform to the section or department to which the goods belong.

13. In the department of raw materials and produce, prizes will be awarded upon a consideration of the value and importance of the article, and the superior excellence of the particular specimens exhibited; and in the case of prepared materials, the novelty and importance of the prepared product, and the superior skill and ingenuity in the preparation, will be considered.

14. In machinery, prizes will be given with reference to novelty in the invention, superiority in the execution, increased efficiency or increased economy in the use of the article exhibited. Its importance in a social view, and the difficulties in perfecting it, will also be taken into account.

15. In manufactures, increased usefulness, such as permanency of colors, improved forms and patterns, superior quality or higher skill in workmanship, new materials used, and combinations of materials, beauty of design in form and color, with reference to utility, and cheapness relatively to excellence of production, will be the basis of decision.

16. In sculpture, models, and the plastic art, rewards will have reference to the beauty and originality of the specimens, to improvements in the processes of production, to the application of art to manufactures, and, in the case of models, to the subjects they represent.

17. Juries, to consist partly of Englishmen and partly of foreigners, will be composed of men of known ability to form a judgment — above the suspicion of either national or individual partiality.

18. No competitor for a prize can be placed on a jury in the particular department in which he is a competitor.

19. To exhibiters from the United States, there have been allotted, of ground space, 85,000 square feet, subject to a deduction of one half for passages; and of wall or hanging space, 40,000 square feet, not subject to deduction.

Articles must be consigned to the secretary, at Boston, who, with permission of the collector, will place them in government stores, without charge for storage.

The committee indulge a hope that the liberal provisions made by the federal government for transportation, will insure from their fellow-citizens a full display from the farm, the garden, and the dairy; the forest and the mine; the factory and the workshop; the laboratory and the studio; and that not only articles possessing the merit of *novelty*, *rarity*, and *high excellence*, but also those of more humble pretensions, which are calculated to promote the well-being of mankind, and are so often met with in Massachusetts, will be contributed to the *Great Industrial Exhibition of the World.*

SAVE MANURE.

Those farmers who have not barn cellars to enable them to save all their manure in the best manner, should contrive to save it in some way, though attended with more trouble than falls to the lot of those who have made preparation for this purpose.

In barns without cellars, the liquid manure may be saved by using various absorbents, as may be convenient; and almost every farmer has loam, sand, or other materials at hand which are useful. Some use coarse fodder for this purpose; but in most cases, by the use of a fodder-cutter, and a little attention in preparing it, it may be used as food, affording nutriment for the animal, and be readily converted into manure.

Sawdust is a good absorbent; so are fine shavings, and the dust from carpenters' and other shops. — Charcoal dust is another valuable absorbent. From many shops and manufactories much refuse matter may often be obtained, that is not only valuable as absorbents, but they will greatly add to the quantity of manure.

Some farmers take up the floor in their cattle-house, and fill loam, muck, or sand under it, to catch and absorb the liquid manure, and then replace the floor. The soil becomes saturated with rich matter during the winter, and is excellent manure in the spring.

Another mode is to remove the floor, fill up with loam to a suitable height, and let it be a bed for the cattle; and, on removing the manure daily, remove the loam that has become wet. Some farmers provide loam or other earth, and place it where it will be convenient to scatter over the floor. There is a great advantage in having dry loam for this purpose; a ton of it will absorb as much as four tons of moist loam, thus saving much in carting and shoveling.

As the liquid manure of animals is worth as much as the solid, every farmer must be aware of the importance of saving it, and he should make arrangements for that purpose.

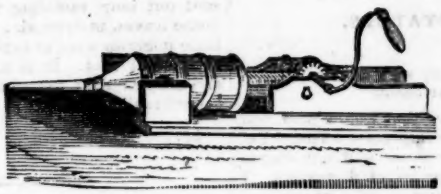
On many a farm where now it is doubtful whether there is profit or loss, this question would become settled at once, in the most favorable manner, on doubling the amount and value of manure.

THE AMERICAN CHURN.

My experience differs so widely from the advertised testimonials, that I am very curious to learn what has been the case with others who have tried the American churn. My dairymaid has had a six-pound churn in use for the last month, (perhaps ten or twelve churnings,) under favorable circumstances, at 58° or 60°. The butter has never come in less than seventeen minutes, usually in about eighteen, and once, it did not come in less than three quarters of an hour; while the testimonials state a much shorter time, namely, from twelve minutes even to four minutes. — *London Gardener's Chronicle*

The manufacture of brandy is now successfully carried on by John A. Scott, Esq., of Washington county, Miss. It is made from the Scuppernong grape, and is pronounced as good and pure an article as the best French brandy.

The Cincinnati Price Current publishes a statement of the number of hogs assessed in seventy-six counties, which show a deficiency of 246,000 head, compared with last year.



SAUSAGE-STUFFER.

With this machine, sausages are stuffed with great expedition and ease. The cylinder is filled with minced meat, into which a follower or piston plays, operated by a crank acting with a cog-wheel upon a rachet bar, forcing the meat into and through the small pipe at the end of the cylinder, stuffing sausages with great rapidity, compared with the old-fashioned method without machinery.

As these machines are now constructed, the gearing is cast iron, and, of course, very substantial and durable; and the only part of wood is the bed or plank at bottom. This simple contrivance, which costs but a trifle, saves much labor.

TREATMENT OF SCARLET FEVER.

Dr. Lindsly, of Washington, strongly recommends the mode of treatment of scarlet fever resorted to by the king of Hanover. It is as follows, and exceedingly simple: —

"From the first day of the illness, and as soon as we are certain of its nature, the patient must be rubbed morning and evening, over the whole body, with a piece of bacon, in such a manner that, with the exception of the head, a covering of fat is every where applied. In order to make this rubbing-in somewhat easier, it is best to take a piece of bacon the size of the hand, choosing a part still armed with the rind, that we may have a firm grasp. On the soft side of the piece slits are to be made, in order to allow the oozing out of the fat. The rubbing must be thoroughly performed, and not too quickly, in order that the skin may be regularly saturated with the fat. The beneficial results of the application are soon obvious: with a rapidity bordering on magic, all, even the most painful, symptoms of the disease are allayed; quiet, sleep, good humor, appetite return, and there remains only the impatience to quit the sick-room."

FRUIT IN CELLARS.

A great deal of winter fruit suffers early decay, in consequence of a deficiency of ventilation, especially during autumn, and after the fruit is deposited. — Another cause of decay is the improper location of the shelves or bins, which are placed against or around the walls. By this inconvenient arrangement, the assorting of decayed specimens must be done all from one side, and the shelves must hence be very narrow, or the operator must stretch himself in a most irksome horizontal position. The circulation of the air is at the same time greatly impeded by the want of space next the walls. To avoid these evils, the shelves should be in the centre, with a passage all round. This allows circulation of air: and the shelves may be twice the width, with the same convenience in assorting or picking. If suspended from the joists above on stiff bars, rats cannot reach them. We have never succeeded so well by any other than this arrangement. It is said that the Germans are very successful in the ventilation of their cellars, by a communication with the principal chimney, the heated air in which necessarily maintains a current, which sweeps out the noxious and stagnant gases from the vegetable and other contents. — *Albany Cultivator.*

SCALDING MILK.

I noticed in your paper of September 25 an article under the above caption, which states that, in Devonshire, England, milk is scalded as soon as taken from the cow, &c., &c. This, I think, is not exactly correct, but cannot state for certain what is done in Devonshire; but in Cornwall, the county next adjoining, the process is, to strain the milk in pans of about two or two and a half gallons, and let it cool in the dairy. Some of those dairies are so constructed as to have a small stream of water to set every pan in to cool. It should be cooled before scalding: the milk taken at night is scalded the next morning; that taken in the morning, in the afternoon. Care must be taken to place the pan over a slow fire, so slow that it would take from thirty to forty minutes to bring it to a scalding heat, which can easily be ascertained by noticing a slight swell in the milk. It is then taken from the fire and set away to cool, as before. The cream is taken off in twenty-four or thirty hours from the time of milking, as needed. Cream from milk thus managed is delicious — too good to talk about — and so rich and thick that I have seen a common dinner-plate laid on the pan on the cream, without breaking the surface of the cream. T. G.

URBANA, Mo., 1850.

— *Dollar Newspaper.*

RECLAIMING LAND.

We frequently meet with instances of reclaiming lands that are quite refreshing in these days of speedy and general exhaustion. A gentleman has just brought us a few samples of timothy-grass, the heads of which are over nine inches long, and the stalks some four and a half to five feet. The land was purchased by its present owner about three years since, and was then so poor that a crop of corn then raised upon the ground was fed off in the field, being too worthless to harvest. Green manuring, (crops raised on the ground and turned in,) and the ordinary manures of the farm, have, in the short period above indicated, effectually resuscitated this worn-out land — *American Agriculturist.*

For the New England Farmer.

INSECTS—POTATOES.

MR. COLE: —

"Just when I thought my work all done,
Alas! I found it scarce begun."

I quote from myself, to show that I am a poet, lest the world should not know so important a fact. Yet the sublimest strains of my muse will not charm away the mischievous propensities of destroyers. I wrote you about the phenomena of a peach-tree casting its fruit, or retaining it merely to wither, rot, and come to nought. The roots had been guarded thoroughly with frequent deposits of ashes, as I thought, after exterminating borers: last fall, and in the spring, the tree was generously mulched with forest-leaves. But sad to say, after my disappointment, a reëxamination below my ashes brought to view a whole summer's work of several fat borers. "Eternal vigilance is the price," not only of "liberty," but of the safety and health of fruit-trees. I revoke the imputation of my poor slandered trees' failure to the blight of winds and cold storms.

I have bored into some apple-trees, and filled the orifice with tar, to ascertain whether the sap will not absorb something of the quality of the tar, and repel curculios, &c., next season. Agricultural philosophers may laugh at me and welcome; for I do not myself know of any assimilating power of fruit-tree sap of any kind to incorporate turpentine with itself, and carry it out to the extremities of the branches, and to the fruit-buds. Sifting the blows over with a mixture of sulphur and plaster, which a friend found was followed by a good sound crop of apples, seems more philosophical; but it is a more difficult operation. Yet there is good sense in the old adage, "There is nothing like trying." My tar has, however, trapped myriads of one species of insects, be they what they may. They cluster upon the extremities of the branches of peach-trees, in September, and with them congregate hordes of small ants. Some have wings, but most of them are without them; and they are quite minute, adhering to the top of the twigs, thoroughly dwarfing their growth, or else killing them. Having bored into the fork of a thrifty young apple-tree, where marks of decay appeared, and then thrust down tar with a stick, multitudes of ants rushed out of the fork, finding their camp invaded; and where the tar had smeared the tree and run down, I found multitudes of the foresaid insects stuck on. Apparently, they were on their way to their burrow, and were arrested in their march, the last of October, when the tar was applied. Perhaps they are aphides going to winter quarters.

Examining the loose scales of bark upon an apple-tree, I find, this morning, that under them these insects have taken refuge, in vast numbers, prepared to resume work on houselike scales next spring. I want a wire brush with a long handle, to curry my trees over thoroughly. Brush-makers, can you furnish the article?

My potatoes, dug early, and spread on my cellar bottom, keep well; and had I exhumed my chenangoes promptly after the first blight of the top, and served them thus, my belief is, I should have saved their lives also. Those potatoes which I found, upon digging, lying deepest in turf ground, were almost all sound and healthy; and those nearest the surface, and on rootlets shot out near the further edges of the hills, were most usually rotted. The air and change of temperature seem to have had something to do in producing the difference discovered. The potato's retentiveness of vegetating power I detect, strikingly, in some found in my cellar, under an inverted box, this fall, and which were raised last year. They had struggled in darkness to propagate themselves, and sent out long rambling vines, which would have borne leaves, in open air; but in lieu of these, many little potatoes were growing, sustained by the life of the parent root. It is my purpose to save parents and offspring, for experimenting upon next year, if spared to do so.

J. LEE.

SALISBURY, CONN., *Nov.* 1850.

For the New England Farmer.

ART *vs.* NATURE.

MR. COLE: I should be very sorry to monopolize a tenth of a tithe of your valuable space without a justification; but, instead of *one*, I have got *two*, to exonerate me from any charge of uncalled-for appropriation, (and these will appear in the sequels;) therefore I almost *demand* a right to be heard, *pro bono publico*.

Where the natural conditions of soil and circumstances favor experiment, effort to improve both is laudable; but, where each is separately averse to improvement, and that result happens to be attained, to great perfection, by dint of a purely practical, science-directed energy, the labor of improvement is praiseworthy correspondingly. I think you will concede the infallibility of my premises; and I am not at all prepared to realize that such a thorough-going pomologist as I know you to be, will deny my conclusion.

Well, sir, I have been "down east" recently; and one of my balmiest recollections is one including a visit to Colonel Moulton, in the town of Porter, Maine, whose reputation as a pomologist is well known. He has constituted a paradise where Pomona herself, I am sure, has a special pride to rusticate in. I saw her choice blessings on this spot in all the luxuriance of their autumnal plenitude; and such a noble sight I could hardly wish to see excelled.

I saw some fifteen hundred fruit-trees on Colonel Moulton's farm, in the full magnificence of their productive munificence; and such a scene was fitted to warm the conception of the most indifferent observer into a glow of pomological enthusiasm. I could talk of details, and profits too, but these are so obvious (by inference) as to require no elaborate mention.

The grand advantage I noted was that which had arisen from example. Such a sight as those barren hills and vales, you, sir, know full well, present now, contrasted with what they exhibited twenty years ago, repairs the vision of the present to the full discernment of the beauty, value, and pride of enlightened improvement. Such improvement is owing to the spirited practice of Colonel Moulton; and, as a benefactor of his kind, and the very palpable interests of humanity, he deserves the grateful recognition of the agricultural community.

Yours, very truly,

JOHN C. MOORE.

BOSTON, *Nov.* 14, 1850.

The Charleston Mercury states that a quantity of castor oil, manufactured from the seed grown in the vicinity of that city, has been shipped to this port. The article, which is represented as being of a superior quality, was prepared by Mr. C. Alfs, who has gone extensively into the business. The seed from which the shipment under notice was made yielded thirty bushels to the acre, and sold at $2 per bushel. The Mercury thinks that quite a lucrative business, both to the planter and manufacturer, will spring up in this new article of export. — *Baltimore paper.*

WIRE FENCES.

Eds. Cultivator: Agreeably to your request, I write you on the subject of making wire fences.

In the fall of 1846, I commenced making wire fence, along a road running through a piece of wood. Five No. 9 wires, about ten inches apart, were stretched from tree to tree, and between each of these wires were stretched smaller ones. The wires were fastened to the trees by nails driven into the trees, one above and one below the wire, causing their heads to touch each other when they touched the wire. The five large wires, it was thought, would keep out cattle, and with the small ones keep out hogs, sheep, &c. This fence failed in the following points: —

1st. The nails opened. This evil was remedied by winding small annealed wire around the nails. This was expensive — has since failed — rusting and being easily broken.

2d. The small wire broke, and sheep and hogs passed through the fence.

3d. The wires became bent; after four years' use, this fence proved a failure, both in appearance and utility.

The next wire fence was along the line of a lot running east and west, through ground liable to heave with the frost, and from its situation exposed to the north-west winds. Good chestnut posts were well put into the ground, about twelve feet apart; some of them braced. Four wires were stretched along these posts, tightened, and fastened with staples made from the same kind of wire. This fence, when first put up, appeared well and strong; but it was a failure. The posts were loosened and heaved with the frosts; the wind from the south would incline some of the posts one way, and the north-west wind, in its fury, would incline some another way. The wire became bent, and in two years the fence was removed. It had failed.

The next fence was made along both sides of a public highway, running east and west, where the snow was liable to be drifted in. Along this road ran cattle, horses, sheep, hogs, &c. With post and board fence, they were often, after a storm, getting in from the road. On the south side is a meadow, on the north a meadow and two gardens, close to the fence.

I have been thus particular, for along this road a wire fence has been made that has now stood over two years: neither winds nor frosts affect it; no snow drifts in the road; no cattle, or horses, or hogs, or sheep pass through it, though grass, corn, potatoes, cabbages, beets, &c., are growing in full sight, almost to their very noses, and nothing but the thin and almost invisible wire presenting, as it were, an unseen, but as yet an impassable barrier.

This fence and others I now make as follows: —

Chestnut posts about eight inches thick, not less than nine feet long, are put into the ground not less than five feet deep, and from one hundred and fifty to three hundred feet apart. Great care is taken to have these posts beyond the reach of frost. The posts at the corners of the lots are *very firmly* braced. Then a board (or plank, or timber, or pole) is laid along between these posts, and small chestnut posts or strips about two and a half feet long, sharpened at each end, are driven into the ground at each end of the boards, so that two boards can be nailed to it; and a short post, or strip, is also driven near the centre of the board. The board is then nailed on to the strip, care being taken that the top of the strip will be a little lower than the top edge of the board when the board is nailed to the strips. Four inches above this board, a quarter inch hole is bored through the post; five inches above this, another hole is bored; seven inches above this, another; eight inches above, another; and ten inches above this, another; (this for a five wire fence.) The wires are now passed through these holes and fastened with staples. In tightening the wire, the weight of the wires is taken off, by rendering them through staples slightly driven into uprights, set up about every fifty feet for that purpose. Care is taken so to tighten the wire, that, in adding the pickets, hereinafter mentioned, the wires will, when the fence is finished, be sufficiently taut. Pickets, four feet long and one inch square, are now, about every four feet, nailed with two nails to the board, (or plank, &c.,) or passed through two staples, driven into the board, (or plank, &c.) The pickets are not necessarily driven into the ground, but stand upon it. Care is taken to have the wires the same distance apart on each picket, as they are at the posts. This is done by placing a picket near the post, and fastening the wires to this picket by large staples, so large that this picket can slide along the wires as you place the other pickets, and fasten them to the board and wires. The wires are fastened to the pickets by small staples either driven home, or so driven that the wires can render through them.

Another fence is made as follows: Five horizontal wires, nine inches apart; pickets four feet apart — no board or plank, &c., at the bottom. This fence is fastened, like a suspension bridge, at the two ends, and oscillates from one to three feet, according as the permanent fastenings are apart. The pickets in some of the stretches, as the ground is uneven, will not touch it; the wires suspending the pickets from the ground. Stones, as wanted, are buried under some of the pickets; strips of iron or wire being wound round them. A piece of wire is then wound round each piece of horizontal wire, close alongside of the picket, beneath which a stone is buried. The fence is thus brought down so that the pickets all touch the ground, and, these wires being then fastened to the stones, the fence will be held in its place, strongly and well, by this unseen fastening. In some cases I hold down the fence by means of the boards or planks nailed, at each end, to each other, by strips of boards about two feet long, nailed along the ends. I have a fence like this running along a common, and no cattle or sheep, &c., have broken through it. Instead of wooden pickets, iron ones can be used, to keep the wires separate and in place.

The following points should be preserved in a wire fence: —

1st. The fence, like a suspension bridge, must be *firmly* fastened at both ends, and *firmly* fastened nowhere else.

2d. The fence must be so constructed, that when cows, horses, hogs, &c., come in contact with it, it will be so loose that their contact will not be apt to bend the wire, and the oscillations of the fence will frighten them from it; yet so firmly fastened that the fence will return to its position when the disturbing cause is removed.

3d. You must have upright supports at proper distances to keep the wires apart, which supports must not be too firmly fastened.

4th. A wire fence should be so constructed that it will keep in and out what you intend to keep in and out; yet so constructed that men can climb over it, and small boys through it, without bending the wires.

The holes that are bored in the large posts are never plugged up with wood. Two men, at seventy-five cents each, exclusive of board, will put up 600 feet of this fence in one day. The cost of wire fence is as follows: say cost of 12 feet, or 1 panel, No. 9 wire, at 5½ cts. per lb., is ½ of a cent per foot: —

12 feet will cost	$0 20
1 board	0 8
3 pickets	0 3
12 nails	0 1

1 post cut up	0 7
Staples	0 3
	$0 42

The gate I use is as follows: A frame with a horizontal or diagonal bar across it. Holes are bored two inches apart through the three bars of the gate, large enough to receive the wires. The wires are placed vertical, and are cut of such a length that each wire runs from the bottom of the gate up through the top bar, curves about two inches above the top bar, returns down through one of the holes, and projects through the bottom bar from one to two inches. The stuff used for a gate twelve feet long is three by four; the stuff used for one of four feet is two by three. The cost of making the first mentioned gate, irrespective of materials, is fifty cents; that of the other is twenty-five cents.

BENJAMIN NOTT.

Rock Hill, Bethlehem, *Sept.* 20, 1850.

— *Albany Cultivator.*

TO COLOR PINE TO IMITATE BLACK WALNUT.

The pine should be perfectly free from knots, (as they will not color,) and a strong solution of hot logwood rubbed carefully all over the pine, and then it is allowed to dry. Another coat may be given, or a number, according to the shade wanted. After the logwood is dried, a solution of copperas should be applied in the same way as the logwood, which will make the color quite black.

It would be better to have a large vessel of strong logwood liquor, in which to steep the pine for a few days, such as an old molasses cask; after which the copperas should be applied, as before stated, with a sponge. The copperas is dissolved with warm water. The logwood must be boiled for three hours in a vessel. It requires to be very strong, but there is no rule that we know of for the quantity; any body, by the directions given, cannot fail in striking the mark. Ramrods for guns are dyed in this way, canes, &c. It is applied to all light-colored woods, as well as pine. If copperas cannot be got handily, a few scraps of iron steeped in vinegar for a few days will answer just as well. — *Scientific American.*

POWDER.

At periods too remote to be ascertained with precision, explosive mixtures were used. Of these gunpowder is best known. Others have passed away, while demands for this have been swelling at a fearful rate — fearful, since it has long been dedicated to destructive purposes, for which it is held of paramount necessity. The scourge of our race, it might have been a chief good; a precious gift of science, it has been prostituted to a purpose the most wicked that man could commit, or evil spirits suggest.

So common and cheap as powder is, it is difficult to realize the value of a device that locks up the strength of giants in a few quiescent grains, and releases it at pleasure; a power that instantaneously dilates into a space two thousand times greater than it slept in. Instead of projecting missiles of death, it might, if properly employed, extend and refine every enjoyment of life. Had a tithe of the treasure and thought expended, during the last three or four centuries, on extending the rage and effect of fire-arms, been devoted to the application of powder as the mover of machinery, society would probably have been equally advanced as it is, if even steam had not been subdued. Strange as the opinion may appear, gunpowder and its affinities have in their elements that which is calculated to contribute as great good to man, as they have heretofore engendered evil. — *Ewbank.*

CORNS ON THE TOES.

These annoying excrescences are produced by long-continued pressure and friction on the parts upon which they occur. The skin is rubbed and irritated by the boot or shoe on one side, and is in immediate contact with the hard bone on the other side, and has no means of escape; and the consequence is, that the epidermis acquires an increased thickness and hardness. Sometimes corns are formed between the toes. Here a particular point of the skin presses against the head of an opposite bone, gets inflamed, and becomes the seat of a corn, which is usually small and soft, and occasionally secretes a minute quantity of fluid. Now and then an ulcer is produced, and the bone itself is diseased, and the case becomes a serious one. We will not, however, detain the reader with further description of a trouble with which he may be quite familiar, but will rather suggest the best means for its amelioration or removal. A very loose shoe or a very snug one is bad. Wear a boot or shoe moderately tight. Daily ablution with soft water and a liberal quantity of soap should be practised, and the parts affected should be kept covered with a piece of nice cotton wool. The above is the safest, neatest, and best way of treating the difficulty in question in all ordinary cases. This I know by experience. — *Canadian Agriculturist.*

SHOES.

The shoes of the horses should be of equal thickness throughout, with a flat ground surface, as those with high heels, which asinine smiths make in imitation of their own, are dangerously absurd. The toe, which ought to be raised, is thus lowered, and Nature's plan reversed, who elevates the point in order to avoid obstructions. The web should be wide, and of the same width throughout, instead of being pinched in, because Vulcan operator "likes to see the shoe well set off at the heels." This is both unphilosophical and detrimental; it deceives the eye of man, and injures the foot of the horse. "The *outer* edge of the foot rests on the inner edge of the shoe, and the remaining width of the web projects beyond the hoof;" so that the master who thinks his horse has a good open foot, only has to be proud of a bad, open shoe, which both conceals deformities underneath, and "invites with open arms a bad road to come and do its worst." The heels are made bare just where the navicular joint is most exposed; and if that be inflamed, what must the agony be when the unprotected foot treads on a sharp flint? The horse "falls suddenly lame," or "drops as if he had been shot," "phrases in much too common use to require explanation;" and small is the pity which the suffering animal meets with from man; who, having destroyed the use of his victim's feet, abuses him because he cannot go; and imputes "grogginess" to him as a crime, as if he were in liquor like a groom, and not in agony. — *Miles, Veterinary Surgeon.*

There are some people who do not appear to know how to think well of any human being.

HINTS TO SCHOOLMASTERS.

Under this head, a correspondent of the Advertiser has the following remarks, which are well worthy of attention: —

"Be not sarcastic. Some teachers have a natural tendency to say things which cut through a boy's heart like a knife. A scholar makes some mistakes; instead of a simple reproof comes a tone of ridicule. The boy feels wronged. One is stung into revengeful passion, another crushed with despair. I do not think a child should ever be mimicked, even for a drawling tone, without explaining beforehand that it is not for ridicule, but to show in what the fault consists; while the scorching sarcasm which some teachers use should be wholly abolished. It tends to call up bad passions, and to engender bad feelings in the child's mind towards the teacher and all that he does.

"A teacher, in order that he may exert a moral and spiritual influence, should be familiar and gentle. There is, no doubt, a dignity that is essential in the school-room, but it need not partake of *arrogance*. True dignity must always be connected with simplicity. Children are keen observers, and they either shrink from artificial austerity, or smile at it as absurd. A teacher who would walk about his school, with a *domineering* manner, might talk about moral and spiritual truth until he was weary, and do little good. To produce much good, a teacher must win the love and confidence of the children; and to do this, he should, in his manners, be natural and gentle.

"So with the tone of the voice. If a teacher is sharp and crabbed in his speech, if he calls out with *dogmatical authority*, he shuts up the hearts of the scholars, and the spell is broken; — they will not listen to the voice of the charmer, charm he never so wisely.

"A subdued manner, and a low, kind tone, will work wonders. Some always speak in the *imperative* mood. 'Fifth boy, second division, bring your book this way.' Another says, 'Master A——, will you bring me your book?'

"Now, both boys know they are to obey; but one does with some degree of scorn what the other does cheerfully. Who would not rather be asked than ordered?"

POULTRY EXHIBITION AT WATERVILLE.

The exhibition of poultry at Waterville, on the 20th inst., was, we are informed, on the whole, even more successful than those who planned it and carried it out had anticipated. The weather was favorable. The number of fowls exhibited was between five and six hundred, arranged in a little less than one hundred apartments. The most of the improved varieties were represented. The Waterville Mail, in speaking of this exhibition, says, "We have nearly forgotten the beautiful Bantam, the graceful Dorking, the pretty Top-knot, and the stately Spanish; and now we look for the Shanghae, the Cochin China, the Chittagong, the Great Malay, the Spangled Hamburg, the Silver Pheasant, and, lastly, the Wild Indian Game Fowl. We have here all the former, and who shall say how many of the latter? We believe all but the Chittagong and Wild Indian. We have all colors, from the pure white to the equally pure black; and all sizes, from one pound to ten. We have geese and ducks, turkeys and hens, enclosed in as great a variety of coops as can be found between Phœnix building and Ticonic bridge. The attendance is good, and the exhibition will do much, without doubt, to advance the interest so generally felt in improving the stock of fowls."

As we were not present on the occasion, we are unable to give an extended or particular notice of the various fowls exhibited. A correspondent, who was present, has furnished us with a very full and interesting account of this exhibition; but owing to a press of other matter, we are obliged to defer its publication until next week. — *Maine Farmer, Nov.* 28.

LABOR IS HONORABLE.

As the cultivation of the soil is the most ancient of all employments, so it is the most dignified and honorable; for it was ordained by the Almighty himself. Yet an idea appears to be common in our country that it is more respectable to live by one's wits than by the labor of his hands. How many fond parents do we hear expressing the hope that their smart sons may become something more than a "plough-jogger," or a mechanic! How many young men crowd the professions of law and medicine who might be more usefully employed in tilling the soil! How many, every year, repair to our towns and cities, anxious to exchange the manly labors of agriculture for the effeminate employment of measuring tape and calico! The idea that labor is not respectable has doubtless been handed down from the ages of feudal barbarism, when the only laborers were slaves, and labor was in consequence degraded; when the only honorable men were the soldiers and priests, and the only honorable employments those of cutting men's throats and emptying their pockets; and it is kept alive at the present day by the depressed condition of the laboring classes in other countries, and by the institution of slavery in our own. Some people appear to think that a man of talent and education is entirely out of his element in the business of farming. The idea that such persons have of the education of a farmer, is aptly illustrated by a remark I once heard from an old backwoodsman in this state. In reply to some one who was boasting of the money he had paid for the education of his children, the old man remarked that he had four sons, whose education had not cost him a dollar; "yet," said he, "they can shoot a bar and make as good a crop of corn as any boys that have been sent to school." A good education is as important in agricultural pursuits, as in the professions usually called learned; as though the skill necessary for the proper management of a farm, and a knowledge of the laws of vegetation, — laws which God himself has established, — do not better deserve the name of learning than an acquaintance with the antiquated forms of law, a hundred years behind the age; or the shuffling, evasion, and quibble that characterize a large portion of the law practice of our land; — as though the farmer who properly mixes a heap of compost manure does not exercise as much science and skill as the doctor who compounds his pills and his sirups; to say nothing of the superior utility of the article. An intelligent and well-educated farmer is as much entitled to the appellation of learned as the practitioner of any other profession. Let the working-men of our population receive the education that they ought to have, and which they would have if our civil and social institutions were what they ought to be, and they will command that respect to which the dignity and importance of their employments entitle them.

But it is not alone in a professional point of view that education is important to our laboring population. In our country they are the depositaries of political power; and upon their virtue and intelligence depends the prosperity of our republican institutions. Ignorance is a species of slavery, and a population wholly uneducated, though professing political rights, would be almost completely under

the control of political demagogues. That our working-men, generally, do not yet fully understand their own interests, is apparent from the political and social evils which exist in our country, and will continue to exist until the people shall demand a reform. — *Bryant's Address, Chicago, Ill.*

MANAGEMENT OF BEES.

Ed. Ohio Cultivator: Some of your correspondents occasionally mention the subject of raising bees; but I do not think that sufficient is said to excite that interest the importance of the business demands. To be successful, it requires promptness and diligence, and then, if it does not impart that peculiar relish and delight which is essential in any employment, a failure is almost inevitable. Aside from the profits of a good supply of honey, the apiarian should have a care for the comfort and welfare of his little laborers.

I offer the following hints to those who may not have experience in the management of bees: Make your boxes of good quarter inch lumber, well jointed, so the millers cannot deposit eggs at the top or corners; the tops should extend one inch over all round, and instead of nails for fastening down, use screws, so it can be taken off and put on without knocking the life almost out of the bees. The size should be about twenty-two inches high, and twelve by fifteen inches broad, (unless the swarm is small,) as it is more convenient to get the honey from large than small boxes. Robbing should be done immediately after the swarming season is over; there is no difficulty in this operation, if you first tie a sheet or table-cloth around the hive at the bottom, so as to keep the bees inside, and, as you raise the top, sprinkle the bees with water, which must be continued more or less until done. An expert hand can soon extract all that should be taken, which should be regulated by the size and strength of the swarm: fasten down the top as at first, and the bees will go willingly and rapidly to work to repair their loss. Place your boxes on a clean plank, under a shed, closed on one side. On the first day of May, raise your boxes on one-inch blocks, for the double purpose of ventilation, and to prevent the return of worms, that may be expelled or thrown down from the inside by the bees; then split a few elder joints, and place them under the boxes; the worms will go under them, and by removing the elders once a day, or every other day, and killing the worms, it will prevent any formidable injury. The above refers entirely to common boxes. There are many plans by which the honey can be taken much easier, and with less injury to the bees. Some adopt the old plan of using small boxes on top, which does very well; but the tops of these boxes should be screwed on. I have constructed a fancy improvement, (in which I find I was almost superseded by friend Mallory, of Bucyrus,) upon the last plan, by adding a second story to my boxes, with a door hung on small hinges, and fastened with a button, and putting in a box or boxes large enough to fill it up, with glass in front, so as to witness the depositing process, and to see when the box is full. I screw the lids on, and put a screw in the end for a knob to pull out by; and when I wish to take the box out, insert a sheet of tin under the box, closing the communication between the main box and little one, then set the box some distance off, and the bees will come out and return to their home. The honey can be cut out; or, if there is another box to fit, I set the box away, and cut it out when wanted for use, which is much the best way, as the honey will not candy.

We have Dugdale's and other patents in use in this neighborhood, and, when properly attended to, are successful; but I think, with the same attention given to destroy the worms, as shown above, that it will require in the miller-catching patents, an apiarian will be about as successful in accumulating swarms and gathering honey.

Bees did well in swarming this season, and in making honey, up to the 20th July, but since that, have done nothing; they have not worked on the buckwheat as usual.

Respectfully yours, JOS. C. BRAND.

Champaign Co., *Sept.* 21, 1850.

— *Ohio Cultivator.*

TO MEASURE CORN IN CRIB.

First find the solid contents of your crib in feet, so far as it is filled with good slip-shucked corn. This will show the number of solid feet of corn your crib contains. We suppose one third of these contents to be of cob, one third of shuck, and one third only of pure corn. Now, dividing the above ascertained solid contents by three, would give you the number of bushels of pure corn, provided a solid foot of shelled corn made a bushel, and three solid feet of slip-shucked corn made a bushel. But this is not correct, because it takes five solid feet to make four bushels. Then you must deduct one fifth from the number of solid feet, in order to ascertain the number of bushels which the house could hold, or does hold, of shelled corn. Remember, if the corn is only slip-shucked, then one third only of the number of bushels must be counted, for the rest is only of cob and shuck.

Suppose a crib is 14 feet wide and 20 feet long, and that the corn in it is ten feet deep. Then multiply the width by the length of the inside of the crib, and multiply that product by 10. This gives you the number of solid feet of corn, viz.: —

14 by 20=280 by 10=2,800 solid feet of corn.
2,800 divided by 5=560 to be subtracted.
2,800=560=2,240 bushels, if shelled corn.
2,240 divided by 3=746 bushels, if in the shuck.

Thus, if I was to measure a gentleman's crib, I would do it as follows: The crib 20 feet long, 14 feet wide, and 11 feet high, I would calculate thus: —

20 by 14=280 by 11=3,080 — 616=2,464 divided by 3=821⅓ bushels to be the contents of the body of his crib when filled with good slip-shucked corn.

Proof. — One solid foot contains 1,728 solid inches, and one bushel contains 2,160¼ solid inches. Now,

1,728 multiplied by 5 is equal to 8,640.
2,150¼ " 4 " 8,601.

You see it is near enough, for measuring corn, to say that five solid feet make four bushels; and from this simple fact the rule is derived.

In measuring a roof that is full of corn, I multiply the length, breadth, and height together, the same as the body of a house, and then divide by 2, before making other calculations; for the roof contains only half as much as a pen having the same length, breadth, and height, but not tapering. — *Selected.*

Pickling. — Put fresh cucumbers, as soon as they are picked from the vine, into weak brine, boiling hot, and let them remain twenty-four hours. They should be taken out and put into the vessel in which they are to be kept, and vinegar, boiling hot, poured upon them, sufficient to cover them. In three days' time the pickles will be fit for use.

Male.

Female.

Eggs.

Worm.

Pupa.

CANKER-WORMS.

For the New England Farmer.

Dear Sir: I hardly know what to say in regard to the canker-worm. I am inclined to think the old mode of the application of tar around the body of the tree, on strips of cloth, canvas, or gunny-bags, six inches wide, and fastened around the trunk, is as good a mode to prevent the grub from ascending the tree, as any other that has as yet been found. My mode has been to use tarred cloth; the tar, when thick, I make thin with oil. I stuff hay, cotton, or sea-weed between the tree and the lower edge of the cloth, to catch the drip of the tar; this serves likewise to tire, perplex, and perhaps entangle the grub, before it gets to the tar on the cloth. I think, if the tar is properly and seasonably applied in the spring, it will prove effectual. But some, on the contrary, think that tar must be applied in autumn, say the first of November. From a close observation of the canker-worm, I am inclined to think but few of the eggs deposited in the autumn are hatched in the spring; as only a very few males ascend in the fall and winter, most of the eggs prove barren.

The cloth should be taken from the trees as soon as the grubs are done running, and the tar, should there be any, scraped from the trees.

I think you will find about all that can be said upon the canker-worm in Dr. Harris's Insects of Massachusetts, page 330. I will send you Köllar on Insects, a German work, and you can see what he says, page 219, on the winter moth. This insect somewhat resembles the canker-worm; and here, by the way, you see where you obtained your plate in the first edition of your Fruit-Book, and friend Thomas has the same error in his book. If this contrivance of what he calls the *boot* completely answers the purpose in arresting the ascent of the winter moth, why will it not our canker-worm? You can print what he says upon the subject, if you like it. It strikes me that it may answer a good purpose, and is cheap. Yours, S. P. FOWLER.

Danvers New Mills, *Nov.* 20, 1850.

Remarks. — In the former editions of the American Fruit-Book, the female of the canker-worm moth is represented with the rudiments of wings. But this is not correct, as appears by the figures at the head of this article, which we have had drawn from the insects. In a recent edition of our Fruit-Book, we have corrected the error.

We would give the mode of protecting trees, as recommended by Köllar; but the following contrivance is much less expensive, and more effectual: — Take two pieces of board, several inches longer, at each end, than the diameter of the tree, and the width half equal to the length, forming a square, or nearly so, when put together at the edges. Cut in each piece a semicircle corresponding with the size of the tree. Put these together around the tree, forming a collar, several feet from the ground. — Fasten them together by hasps at the top, or by cleats nailed to one piece of the board, and by screws through the cleats into the other board after it is properly adjusted. Or small nails may be used, leaving the heads out, so as to draw them when the collar is to be removed.

Stuff some soft substance between the collar and tree, to prevent the ascent of the grubs, where there may not be a good fit. Apply tar on the under side of this collar. It will be secure from rain, sun, and various falling substances, that tend to render tar ineffectual in a short time, unless often renewed. We think that it is a very cheap and efficient mode of tarring, and less liable to injure the tree than other modes usually practised.

As canker-worms are on the increase in this section, fruit-growers should turn their attention to the subject, and learn the best mode of destroying them, or protecting their fruit-trees against their depredations. — Ed.

JEFFERSON COUNTY DAIRY FARMING.

It would greatly surprise some of the western and southern stock farmers, who boast of their favored climate and rich pastures, to visit this rock-bound county upon the shores of Ontario and the St. Lawrence, to see how much more money is made by the produce of cows in a climate of six or seven winter months, than in regions where it is very mild, or frost quite unknown.

In my late flying trip to Watertown, N. Y., I had the pleasure of a visit to the farm of Mr. Moses Eames, about seven miles from the village, six hundred feet elevation above it, and twelve hundred feet above tide water, and north of latitude 44°. The surface is quite hilly and stony, with underlying rocks, and would be thought by strangers cold and unproductive. Now, August 21, is the season of harvest of wheat, oats, barley, and grass. Mr. E. keeps forty-three cows, and makes a cheese every day that will weigh, when ready for market, ninety pounds; worth six cents a pound at home, or $5 40, besides a liberal supply of milk and butter for a large family. And better butter and cheese I never tasted; nor did I ever sit at a better table than in this farm-house — this American farmer's home. Ah, "Home, sweet Home," indeed.

Milking the Cows. — These are driven from the pasture long enough before night to enable the laborers to finish by daylight, without haste. From the lower yard, about half are driven into a commodious stable, and fastened in a long line by "stanchions," composed of two upright pieces of wood about five feet long, one of which is fast in a sill, and in a girder at the top, and the other movable, so that the top falls back to give the cow convenience of putting her head and horns between, and is then closed with a catch, almost as fast as a man can walk along. Cows

soon learn to take their places without any confusion. As soon as all are fast, the milkers commence, each being seated upon a stool or chair, with a sort of back attached for the convenience of handling; and a great convenience it is. The milking is done with both hands, as rapidly as possible, as the owner has found that a dribbling milker will deteriorate the best cow in a very short time. As soon as all are done, the first section of the herd are turned out at another door, which opens into the upper yard, and then the second section is brought in, and when all are done, they are driven again to pasture. In the morning, the same course is repeated.

The Advantages of Stabling to Milk are, that all the cows are sure to be milked; all stand quiet while milking; and there is no hooking and running one after another, and upsetting milk and milkmaid. If it is rainy and muddy, all are sheltered and upon a clean floor, and men and beast are better tempered, and get and give more milk, and save a deal of scolding, much time, and more money; insomuch that a herd of forty cows will pay for a shelter in one season. Putting in one half at a time is an advantage; for twenty are easier managed, with less huddling in the stable, than forty, and are only confined half as long, make less droppings, and only require half as much stable room, and each section has an opportunity to drink in the yard while the other is in the stable.

Disposal of the Milk. — The milk-pails are carried, as fast as filled, to the milk-house, and emptied into a vat of suitable size, say seven by four feet, and two feet deep, made of wood, lined with tin, having a space between, into which cold spring water is drawn at night, to cool the milk and promote the raising of the cream. This vat is elevated upon legs for greater convenience, so that the top is some three and a half feet high. When the morning milk is added, the water is drawn off, and a conducting pipe from a small boiler fills the space with steam to scald the curd, which is made in the same vat. The steam is then turned into a barrel of water, and heats that ready for cleansing utensils without the least trouble.

Taking off the Whey. — Another vat, of a smaller size, with rollers in the legs, is placed along the side, and surface whey dipped off, and then it is rolled to a spot where a conductor, opening through the floor, receives the contents, and carries it down to the pig-pen. The curd is next dipped into a strainer in the small vat, and the whey drained off; and then it is rolled alongside of the press, and put into the hoop upon a sliding board; so the whole is done without any hard lifting. The press is one of Mr. Eames's own make, and, with a small weight, will give seven tons' pressure. In turning the cheese in press, a small wheel table is rolled alongside, upon which it is done with ease. Upon the same, it is conveyed into the cheese-room, where the cheese are kept upon long tables, and turned by rolling upon edge and over, which is generally done by Mr. E. himself, but without great exertion of strength.

The next process, after placing upon the table, is, to bandage with thin muslin, made on purpose, and costing only three cents a yard. The strips are cut two or three inches wider than the cheese is thick, and the edges turned over the corners and sewed, so that it is impossible for a cheese to spread or flatten down, as they did before bandaging came in fashion.

The Temperature of the Cheese-Room is kept cool and dry by using a stove to drive off dampness; and then it can be frequently washed with cold water.

The Average Product of Dairy Cows, in this county, is from $25 to $35 each, per annum, and the average value per head, from $20 to $28.

Wintering Cows. — Two tons of good hay is the amount estimated for each cow, besides straw and other coarse feed. If giving milk, grain or roots are added, as every thing extra fed is paid for in extra milk. The cows are generally of the common breed, but look remarkably fine, not only upon this well-conducted farm, but upon hundreds of others of the same sort in this rich farming county.

Buying Curd. — I was told of one man in this county, who buys the curd of five hundred cows, every day, and makes it into cheese. I understand that he pays five cents a pound, and takes it fresh as soon as well drained. Mr. E. says he can afford to pay that price. Cheese and butter are the staple exports of this county, and no grain-growing region, within my knowledge, can show so large a proportion of wealthy farmers, good farm-houses, good-looking and well-improved farms, and such a number of well-to-do-in-the-world people as Jefferson county. The women and children here take more interest in agricultural improvement, and know more about it, than a majority of the men in some places. When you know the farmers' wives there, you will not be surprised to find such pretty girls and noble boys. Would you know the reason? They read. Yes, sir, they read, and read agricultural papers, too. One handsome, intelligent boy, about fourteen years of age, came up to me just as I was leaving, and said, "Mr. Robinson, I should like to have you send me the Agriculturist for a year. Here is the money." That boy will make an intelligent, good man. The same boy had the sole management of a large family garden, the past summer. I need not tell you it was a good one.

Jefferson County Agricultural Society. — I will tell you what fosters and keeps alive this spirit of improvement in this county. They have one of the oldest and one of the most active and efficient agricultural societies in the state; and the society have a hall, or place of meeting, upwards of two hundred feet long, and fifty feet wide, capable of accommodating three thousand people. It was built by the funds of the society, and is emphatically "the people's meeting-house;" for there, all large public meetings are held, besides the agricultural annual fairs. What other county will look to this one of the north for an example, and go and do likewise?

In addition to the improved progress of agriculture, manufacturing of cotton, wool, paper, flour, axes, and other things, flourish here in an equal degree.

Plank Roads. — There are six of these valuable improvements leading out of Watertown, which is rising from the ashes of the great fire, like a phœnix in revivified plumage.

Thin Soil. — Much land in this county lies upon a flat surface of rock, so near that the plough sometimes runs quite down to it. When this is lime rock, the land is very productive, and does not suffer so much as I should expect by drought. It produces sweet grass, and is more valuable for dairy purposes than any other. A railroad, now building through this county, will soon open its treasures to the view of the world. I intend to see more of it myself.

Creating a Spring. — When fitting up his dairy, Mr. Eames was much at a loss about a supply of water, having no spring that would give him a constant running stream. But he got one; and the way he did it is worthy of notice and imitation. He examined the side hill, about one hundred rods above the house, and selected a favorable spot, where the land had a "spouty" appearance, and dug a reservoir, and wing ditches to form under-drains into it; and soon had the satisfaction to find the plan succeed, which gave him a living fountain, that runs summer and winter in the cow-yard, without fail from drought or frost. This is only one of the fruits of an intelligent mind devoted to agricultural improvement, and possessed by a self-made man. But he is a reading man as well as a working one.

SOLON ROBINSON

— *American Agriculturist.*

ARTESIAN WELLS.

Under this name is designated a cylindrical perforation, bored vertically down through one or more of the geological strata of the earth, till it passes into a porous gravel bed containing water, placed under such incumbent pressure as to make it mount up through the perforation, either to the surface, or to a height convenient for the operation of a pump. In the first case, these wells are called spouting or overflowing. This property is not directly proportional to the depth, as might at first sight be supposed, but to the subjacent pressure upon the water. We do not know exactly the period at which the borer or sound was applied to the investigation of subterranean fountains, but we believe the first overflowing wells were made in the ancient French province of Artois, whence the name of Artesian. These wells, of such importance to agriculture and manufactures, and which cost nothing to keep them in condition, have been in use, undoubtedly, for several centuries in the northern departments of France and the north of Italy; but it is not more than fifty or sixty years since they became known in England and Germany. There are now a great many such wells in London and its neighborhood, perforated through the immensely thick bed of the London clay, and even through some portions of the subjacent chalk. The boring of such wells has given much insight into the geological structure of many districts.

The formation of Artesian wells depends on two things, essentially distinct from each other: First, on an acquaintance with the physical constitution or nature of the mineral structure of each particular country; and, second, on the skilful direction of the processes by which we can reach the water level, and of those by which we can promote its ascent in the tube. We shall first treat of the best method of making the well, and then offer some general remarks on the other subjects.

The operations employed for penetrating the soil are entirely similar to those daily practised by the miner, in boring to find metallic veins; but the well excavator must resort to peculiar expedients to prevent the purer water, which comes from deep strata, mingling with the cruder waters of the alluvial beds near the surface of the ground, as also to prevent the small perforation getting eventually filled with rubbish.

The cause of overflowing wells has been ascribed to a variety of circumstances. But, as it is now generally admitted that the numerous springs which issue from the ground proceed from the infiltration of the waters progressively condensed in rain, dew, snow, &c., upon the surface of our globe, the theory of these interior streamlets becomes by no means intricate; being anolagous to that of siphons and water jets, as expounded in the treatises on physics. The waters are diffused, after condensation, upon the surface of the soil, and percolate downwards, through the various pores and fissures of the geological strata, to be again united subterraneously in veins, rills, streamlets, or expanded films, of greater or less magnitude or regularity. The beds traversed by numerous disjunctions will give occasion to numerous interior currents in all directions, which cannot be recovered and brought to the day; but when the ground is composed of strata of sand or gravel, very permeable to water, separated by other strata nearly impervious to it, reservoirs are formed to our hand, from which an abundant supply of water may be spontaneously raised. In this case, as soon as the upper stratum is perforated, the waters may rise, in consequence of the hydrostatic pressure upon the lower strata, and even overflow the surface in a constant stream, provided the level from which they proceed be proportionably higher.

The sheets of water occur principally at the separation of two contiguous formations; and if the succession of the geological strata be considered, this distribution of the water will be seen to be its necessary consequence. In fact, the lower beds are frequently composed of compact sandstone or limestone, and the upper beds of clay. In level countries, the formations being almost always in horizontal beds, the waters which feed the Artesian wells must come from districts somewhat remote, where the strata are more elevated, as towards the secondary or transition rocks. The copious streams condensed upon the sides of these colder lands may be, therefore, regarded as the proper reservoirs of our wells. — *Selected.*

PORTABLE STEAM ENGINES.

Horace Greeley thus describes a steam engine which he saw during a recent visit to Watertown, New York: —

"The best thing I saw in Watertown was the turnout of two thousand people on a wild, stormy night, to hear a dry talk on temperance; the next best was a new 'Portable Steam Engine,' invented and manufactured by Howard & Bradford, and sold (including boiler and all fixtures) at these rates: half a horse power, $75; one horse, $100; two horse power, $160; three horse, $225; four horse, $300. The two horse engine I examined was running a Napier power press briskly, while burning about as much fuel as a common kitchen range. Certainly, a ton of sea-coal would amply suffice to run it a fortnight, night and day; or a month, ten hours per day. The time must be at hand when every thrifty farmer, with nearly every mechanic, will have such an engine of his own; and chopping straw, turning grindstone, churning, chopping wood, threshing, &c., will have ceased to become a mechanical operation. Printing (press work) by hand must rapidly disappear before the approach of this engine, which will be running on wheels, and driving a scythe before it, or drawing a plough behind it, within five years. We have hardly begun to use steam as yet."

The following notice of this portable steam engine is from the Trans. N. Y. Ag. Soc.: —

"This engine is a beautiful piece of mechanism, of half horse power, working to a charm. It was operated in the hall, and attracted great attention. It propelled a grindstone, lathe, straw-cutter, &c., working with ease at from five hundred to eight hundred revolutions per minute. With it a farmer might saw his wood, cut his straw and hay, grind his tools, steam his potatoes and other feed with the surplus steam, and, while thus operating, save the labor and board of two or three men. It is well worthy of careful attention, and, if durable, of general encouragement. It requires from one to one and a half cents' worth of fuel per hour to propel it, and costs only $75." — *Ohio Cultivator.*

THE GREYHOUND.

The modern, smooth-haired greyhound is a very elegant dog; remarkable for its extreme velocity, in which it is, we believe, superior to the rough-haired dogs of the olden time, though not to some of the modern rough greyhounds, in which a cross of the old rough breed, or Scottish deerhound, prevails. No greyhounds used for the hare equal in speed and endurance those of our island; and none — so improved

of late years is the breed — equal them in symmetry; every action is light, easy, and elegant, yet firm and vigorous.

The greyhound is highly sensitive, and very good tempered; like the Irish wolf-dog, it is peaceable and affectionate, and fierce only in the chase of its quarry, or when excited to combat. On one occasion only have we ever seen a greyhound fight with another dog; and in that instance, the animal, a roguish brindle dog, was set upon by a large dog of a mongrel mastiff breed, and forced to self-defence. Short, indeed, was the combat; in a few seconds, the aggressor sunk severely torn, and was taken away. Slim as those dogs are, their muscular powers are very great; like the race-horse, they are compact, of iron muscle and ivory bone, with no superfluous fat nor loose cellular tissue, and are consequently deceptive to the eye, which is, in general, accustomed to see strength conjoined with massiveness. Yet we have but to consider the chest, loins, and limbs of a greyhound, and regard the "*tori*" of the arms and thighs, to feel assured of the possession of great power. The smooth greyhound, or glaze hound of the older writers, follows exclusively by the eye; whereas all the old rough breeds could recover the track of the game by the powers of smell; but in the modern dog, every quality is sacrificed to fleetness, and certainly, for sudden and violent bursts of exertion, the present breed has never been equalled.

Many trials for ascertaining the speed of the greyhound have been undertaken, and Daniel's opinion seems to be, on the whole, correct, viz., that, on flat ground, a first-rate race-horse would be superior to the greyhound; but that, in a hilly country, the greyhound would have the advantage. Much, however, in the latter case, would depend upon the dog being habituated to hilly districts; for a greyhound accustomed only to flat plains, though swifter on them than a Yorkshire greyhound, would yield to the latter in a hilly country. The hare and the greyhound seem to be well matched; the swiftness of both animals is astonishing, and a well-contested run is an animating sight. Daniel records the circumstance of a brace of greyhounds, in Lincolnshire, running a hare from her seat to where she was killed, a distance measuring, in a straight line, upwards of four miles, in twelve minutes; but as there were a great many turns during the course, the actual distance was considerably more. The hare ran herself to death before the greyhounds touched her. — *Knight's History of the Dog.*

NEIGHBOR WILKINS'S HINT.

A man, having purchased a worn out-farm, and invested all his money in his real estate, tried hard by his labor to make it produce a crop. After a laborious summer's work, he signally failed. His crops of corn, oats, and buckwheat were scarcely worth harvesting. Winter came on, and with it discouragement and despondency. He met his neighbor, and, in the language of Scripture, inquired, "What shall I do?" His neighbor, in reply, in true Yankee style, answered by asking another. "Neighbor Wilkins, have you ever kept a hired man on your farm?" "Always." "How can you gain the greatest amount of labor in a season from his efforts?" "In the first place, give him a plentiful supply of food, for a full stomach for a laborer is a jewel; next, begin the day early, and keep steady at it." "You have answered truly; manage your farm as you do your hired man. Feed it with nourishment for vegetation; feed it full and keep it fed. Clear out the barn-yard; dig up the muck from the swamp; sow on all the ashes you can get; cart sand from the drainage of the streets. When you begin upon a field, feed it, feed it full, and keep it fed. Then go to the next lot, and feed in the same style. Such recollect the kindness of the owner, and they pay him for it more than fifty fold. — Then plough and dig, and the reward is sure." Neighbor Wilkins opened his eyes in astonishment at his own ignorance, and said, "I see! I see! A feeble, starved man cannot bear much. A poor, starved field cannot bear much." Common sense might have taught him, but it had not. Thousands, like him, "scratch gravel" for nought all their days.

Neighbor Wilkins saw where he missed it. The next year he planted four acres of corn, after he had coated the field with all the fertilizing material he could gather in one short winter. He told me that "he had scraped all creation." November told a true story. Two hundred and sixty bushels of corn made him laugh; his wife made puddings without grumbling; and his children ate with pleasure. Thus friend Wilkins went from field to field, and fed it as he went. In its turn it fed him, his family, and cattle. His barren farm became productive; his naked field became clothed with herbage. He became rich; his farm was rich. Peace dwelt in his household, plenty filled his granaries, and fortune smiled upon him. If you are an unfortunate farmer, cursed with poor land and stinted crops, look at Mr. Wilkins, and, in the language of the Bible, "Go thou and do likewise." — *Dollar Newspaper.*

NORTHERN SPY APPLE.

We had hoped to be able to test the qualities of this apple ourselves during the present season, but our trees failed to produce fruit. It is yet undecided whether it is destined to take a place alongside of the Canada Red, Pryor's Red, Tewksbury Blush, and Roxbury Russet, as a late spring apple, in this vicinity.

The following remarks from the editor of the Genesee Farmer determine the point, that on rich limestone soils it is perhaps unequalled. His authority is unquestionable. On such soils which abound in the western and middle portions of Ohio, it should be introduced into extensive cultivation. — *Family Visitor.*

A few days ago we were invited to ride out to Mr. Hand's, of Mendon, in this county, to see his Northern Spy apple-trees before the crops were gathered; and we can safely say that we have never been more gratified with any thing in the way of bearing fruit-trees. A great deal has been said about the peculiar tendency of this variety to produce a large proportion of small, inferior, or unmarketable fruit; and we only wish that those who entertain such an opinion of it could have been with us, and seen Mr. Hand's trees. A more abundant, uniform, and *perfect* crop we have never seen, of *any* variety. Twenty-four trees, we believe, in one row, some sixteen years old, with straight trunks sixteen feet high and perhaps a foot in diameter, with lofty symmetrical heads loaded in every part, the boughs bending almost to the ground with large and beautiful crimson fruit, is surely a pleasing sight. Of small, unmarketable fruit we could see *none*. Mr. Hand has probably one hundred and fifty barrels, and has sold most of them at $2 50 per barrel, while other varieties sell for $1 25 to $1 50.

It has been said that the Northern Spy requires free pruning and high culture; and there is no doubt that it will be much better with such treatment than if neglected. So will all other varieties, and especially those that mature so late in the season. We

notice that Mr. Hand's trees are in excellent condition. He has pruned out the centre, so that it is quite open, thus giving the sunlight free access to all parts of the trees; but the trees stand too close; the lower branches of the adjoining trees are already meeting and coming in contact with each other, so that the fruit on them is considerably shaded, and consequently less highly colored than those on the top branches, and they will not be so finely flavored. Mr. Hand pointed out a tree that stood in an open space, and on this every specimen was highly colored. It is a false economy to plant apple-trees too closely. We allude to this fruit now, for the benefit of distant cultivators who remain in doubt as to its value as an orchard variety."

JERSEY COWS.

We copy from the Journal of the N. Y. State Agricultural Society the following communication from Col. Le Couteur, Bellevue, Island of Jersey, on this famous breed of cows: —

He writes that he has forwarded through His Excellency Abbott Lawrence, in answer to our request, lithographic impressions of the Jersey breed of cattle, and the scale of points of a perfect animal of the breed; and also two essays written by Col. Le Couteur, one on the Jersey cow, the other on the culture of the parsnip. The cost of a yearling bull of the pure Jersey breed would be from £10 to £12 sterling, ($48 to $58,) delivered at Southampton; and that a yearling prize heifer would be furnished at from £10 to £15.

The breed of cattle familiarly known in Great Britain as the Alderney, and correctly termed in the article Cattle, of the Library of Useful Knowledge, the "crumpled horned," was originally Norman, it is conceived, as cows very similar to them in form and color are to be seen in various parts of Normandy; but the difference in their milking and creaming qualities is really astonishing, the Jersey cow producing nearly double the quantity of butter.

The race is miscalled "Alderney," as far as Jersey is concerned; for about seventy years since, M. Dumas, Esq., of St. Peter's, afterwards the chief magistrate, sent some of the best Jersey cows to his father-in-law, the then proprietor of Alderney; so that the Jersey was already at that period an improved, and superior to the Alderney, race. It has since been vastly amended in form, and generally so in various qualities, though the best of those recorded at that period gave as much milk and butter as the best do now.

Ten years have elapsed since the attempt was first made by fixed rules to improve the form and quality of the Jersey cow. Two beautiful cows were selected, with the best qualities, as models. One of these was held to be perfect in her barrel and fore quarters; the other equally so in her hind quarters. From these two, points thirty-six in number were laid down to be the rule for governing the judges in all the cattle-shows of the Jersey Agricultural Society.

IMPORTANCE OF PURE WATER FOR CATTLE.

Lawrence, in his Farmers' and Graziers' Complete Guide, has the following: —

Dr. Jenner, who conferred that great blessing on mankind — the cow-pock inoculation, considered that giving pure water to cows was of more importance than persons are generally aware. There were farmers in his neighborhood, whose cows, while they drank the pond water, were rarely ever free from red-water or swelled udders; and the losses they sustained from these causes, together with the numerous abortions their cows suffered, increased to an alarming extent. One of them at length, supposing that the water they drank had something to do with producing their disorders, sunk three wells on different parts of the farm, and pumped the water into troughs for the cattle. His success was gratifying: the red-water soon ceased, and the swellings of the udder subsided; and the produce of the renovated animals increased both in quantity and quality. Other farmers followed the same practice, and in less than six months not a case of red-water, swollen udder, or abortion, was heard of in the neighborhood. — *Scientific American.*

TO COOK THE EGG-PLANT.

The following mode has given satisfaction, so far as we have known it tried: Cut the purple egg-plant into slices a third of an inch thick. Put the slices on a plate, one over the other, with a sprinkling of fine salt between each layer, and lay a weight of three or four pounds on the top; leave them in this situation four or five hours, or over night. The salt will form a liquid with the juice of the egg-plant, which will take out the bitter quality. The liquid should be drained off. Fry them brown in lard or butter.

The following is the mode of stewing the plant: Take the purple kind, stew till soft, take off the skin, mash it with butter and sweet herbs, grate bread over the top, and bake it till brown. — *Scientific American.*

Two carrier pigeons, taken out by Sir John Ross, who is in search of Sir John Franklin, have arrived at their homes in Scotland. They have flown 2000 miles.

IMPORTANCE OF LITTLE THINGS.

While Michael Angelo was employed in the completion of one of his famous statues, he received a visit from a friend, who expressed his admiration of the work, but who, on repeating his visit, was astonished at the apparently slow progress which had been made, and exclaimed, "You have been idle since I saw you last." "By no means," replied the artist. "I have retouched this part, and polished that; I have softened this feature, and brought out this muscle; I have given more expression to this lip, and more energy to this limb." "Well, well," interrupted his friend, "but all these are trifles." "It may be so," was the answer; "but recollect that trifles make perfection, and that perfection is no trifle." This little incident may, we think, be brought to bear upon the work of instruction. May it not teach us a lesson of encouragement? Week succeeds week; year after year passes away; and each revolving period of time finds us still engaged in the same labor, while, perhaps, were we to judge by appearances, most of us would arrive at the conclusion, that all our expenditure of time and strength has proved wholly in vain. But is it really so? Have we not been imparting new ideas, or dwelling on truths previously known? Have we not been explaining essential doctrines, or inculcating important duties? Have we not been seeking to develop the faculties of the children's minds, and have we not aimed at the right formation of their habits? True,

the result of each of these does not immediately strike the view; but has not each an important bearing upon the general character, upon the present happiness, and, perhaps more than we can at present think, upon the future condition of those who have been the objects of our watchful solicitude?

BEAUTIFYING THE HOMESTEAD.

We are pleased to learn that this interesting subject has attracted the notice of at least one agricultural society. The following is taken from the report of a committee appointed by the Rensselaer (N. Y.) Agricultural Society, on this subject: —

What should the farmer do in return for the artisan, whose life is wasted by anxious and ceaseless toil, and who is shut out from rural blessings? We answer, Do his duty to himself; it is all that is asked or required of him. We claim it to be the duty of every man who is a farmer, to plant fruit and ornamental trees, to cultivate and grow the vine, as well as all useful vegetables; to beautify and adorn his grounds and garden with flowers, plants, and shrubbery, and so arrange his yards and grounds as to give his habitation as Eden-like an appearance as possible. Should our farmers be thus true to themselves, and dutiful to nature, then with truth of our country it might be said, in the language of the poet, 'tis

"The land of the myrtle, the cypress, and vine,
Where all but the spirit of man is divine."

Nothing is so attractive to the traveller as the fine "country residences." They are something for the eye to feast upon. They please the imagination, cheer the heart, and bring with them all the associations of happiness and home. "Country seat" gives value to the farm upon which it is situated.

One blessing follows another. Sociality, refinement, and learning follow in the train of rural improvement. The mind keeps pace with the outer man, and the love of the beautiful in nature inspires the mind with the love of the useful and the good. It stops not then; — it teaches the mind "to look from nature up to nature's God."

Your committee would therefore recommend the adoption of the accompanying resolution by the society: —

Resolved, That the Rensselaer County Agricultural Society, for the purpose of giving encouragement to those who will "beautify and adorn" their "country seats," hereby establish an award on "country seats," including dwelling, grounds, gardens, trees, and shrubbery; and will, in the annual report of this society to the state society, recommend the publication, by the said state society, of the drawing and description of such "country seat" as the society shall by their committee deem advisable.

Resolved, That a committee, consisting of five members of this society, shall be appointed in the same manner as other committees of the society are, to be called "A Committee on Country Seats," whose duty it shall be, at each annual fair, to examine and report upon all such drawings and descriptions of "country seats" entered for competition. Said committee, in their award, shall designate the name of the "country seats" entitled to the honor of said recommendation to the state society, and shall likewise award said successful competitor each a diploma, and a copy of the Transactions of the state society and of the American Institute.

Resolved, That any person, a member of the "Rensselaer County Agricultural Society," owning or having an interest in any "country seat" in this county, who shall, on or previous to the first day of each annual fair, make, or cause to be made, an accurate drawing and description of such "country seat," and file the same with the recording secretary of this society, shall be entitled to compete for the honors above specified.

All of which is respectfully submitted.

JOHN FITCH,
HORACE HERRINGTON,
JOSHUA S. LEWIS.

Troy, *July* 9, 1850.

POTATOES.

A great diversity of opinion exists as to the best mode of cultivating this valuable culinary article. For the last ten years I have experimented with them, and I give the following as the result of my experience: —

1. The *soil* should be moderately rich; not very rich, for if so, they will "run to tops," and bear but a poor crop. This, with me, is no fancied notion. It is even so.

2. The seed should neither be the "potato balls," or small potatoes. I never could do much with either; the product is invariably small and watery. I cannot assign any reason, except the general one, that "like begets its like." I always select good-sized ones, and cut each one into several pieces; each piece so cut as to have an "eye."

3. *The Mode of Planting.* — Some contend for hills, from three to four feet apart; some for drills; and this mode I think preferable. Potatoes should be dropped in drills, three or four feet apart; each potato, or piece, three or four inches apart. When up cleverly, they should be hoed — more to rid them of weeds than any other purpose. Next, the plough should follow; and after a suitable time has elapsed, they should have another ploughing and a good hoeing, and then they can be "laid by." They ought not to be touched after they commence blossoming, for the reason that their roots begin to run and spread, and of course, if the ground is disturbed, they will be.

4. *Digging.* — This may now be done with a hoe or plough. Be careful not to cut or bruise them, as this makes them disposed to rot.

5. *Securing.* — Select a good dry spot, and with a hoe scrape up the dirt in a circular form, not deep. After your potatoes are thoroughly dried by the sun, put them in the hole thus previously prepared. Now cover them up with dry straw. Next, cover them, from three to five feet thick, with dirt, "spanking" your heap with your shovel, when done, so as to make it shed rain well. Thus put up, your potatoes will keep sound and good till spring.

M. H. A.

Pittsfield, Ill., 1850.
— *Dollar Newspaper.*

TO TOUGHEN NEW EARTHEN WARE.

It is a bad plan to put new earthen ware into boiling hot water; it should first be plunged into cold water, and placed over a fire, where it will heat moderately to the boiling point, and then be permitted to cool again. This process greatly promotes the toughness and durability of common earthen ware, which is generally objectionable for domestic uses, on account of its fragility. The glazing on this kind of ware will remain uninjured by the boiling if a handful of rye or wheat bran be added to the water, and prepare it to withstand successfully, and for a long time, the action of acid or salt. — *Selected.*

HOW COAL WAS MADE.

Geology has proved that, at one period, there existed an enormously abundant land vegetation, the ruins or rubbish of which, carried into seas, and there sunk to the bottom, and afterwards covered over by sand and mud beds, became the substance which we now recognize as coal. This was a natural transaction of vast consequence to us, seeing how much utility we find in coal, both for warming our dwellings, and for various manufactures, as well as the production of steam, by which so great a mechanical power is generated. It may naturally excite surprise, that the vegetable remains should have so completely changed their apparent character, and become black. But this can be explained by chemistry; and part of the marvel becomes clear to the simplest understanding when we recall the familiar fact, that damp hay, thrown closely into a heap, gives out heat, and becomes of a dark color. When a vegetable mass is excluded from the air, and subjected to great pressure, a bituminous fermentation is produced, and the result is the mineral coal, which is of various characters, according as the mass has been originally intermingled with sand, clay, or any other earthy impurities.

On account of the change effected by mineralization, it is difficult to detect in coal the traces of a vegetable structure; but these can be made clear in all except the highly bituminous coking coal, by cutting or polishing it down into thin, transparent slices, when the microscope shows the fibres and cells very plainly. From distinct isolated specimens found in the sandstones amidst the coal-beds, we discover the nature of the plants of this era. They are almost all of a simple cellular structure, and such as exist with us in small forms, (horse-tails, club-mosses, and fens,) but advanced to an enormous magnitude. The species are all long since extinct. The vegetation generally is such as now grows in clusters of tropical islands; but it must have been the result of high temperature, obtained otherwise than that of the tropical regions now is, for the coal strata are found in the temperate, and even the polar regions.

The conclusion, therefore, to which most geologists have arrived, is, that the earth, originally an incandescent or highly heated mass, was gradually cooled down, until, in the carboniferous period, it fostered a growth of terrestrial vegetation all over its surface, to which the existing jungles of tropics are mere barrenness in comparison. The high and uniform temperature, combined with a greater proportion of carbonic acid gas in the manufacture, could not only sustain a gigantic and prolific vegetation, but would also create dense vapors, showers, and rains; and these, again, gigantic rivers, periodical inundations, and deltas. Thus all the conditions for extensive deposits of wood in estuaries would arise from the high temperature; and every circumstance connected with the coal measures points to such conditions. — *Chambers's Miscellany.*

THE SHORT-HORNS.

In his Compend of American Agriculture, Mr. Allen says, —

"The short-horns, or Durhams, are decidedly the most showy and taking among the cattle species. They are of all colors, from a full deep red to a pure creamy white; but generally have both intermixed in larger or smaller patches, or intimately blended in a beautiful roan. Black, brown, or brindle are not recognized among pure bred short-horns. Their form is well spread, symmetrical, and imposing, and capable of sustaining a large weight of valuable carcass. The horn was originally branching, and turned upward, but now frequently has a downward tendency, with the tips pointing towards each other. They are light and comparatively short, clear, highly polished, and waxy. The head is finely formed, with a longer face, but not so fine a muzzle, as the Devon. The neck is delicately formed without any dewlap; the brisket projecting, and the great depth and width of the chest giving short, well-spread fore legs. The crops are good; back and loin broad and flat; ribs projecting; deep flank and twist; tail well set up, strong at the roots, and tapering. They have a thick covering of soft hair, and are mellow to the touch, technically termed *handling well.* They mature early and rapidly for the quantity of food consumed, yielding largely of good beef with little offal. As a breed, they are excellent milkers, though some families of short-horns surpass others in this quality. The short-horns are assigned a high antiquity by the oldest breeders in the counties of Durham and Yorkshire, England, the place of their origin, and, for a long time, of their almost exclusive breeding."

BEAUTIFUL EXTRACT.

One fountain there is, whose deep-lying vein has only just begun to throw up its silver drops among mankind — a fountain which will allay the thirst of millions, and will give to those who drink from it peace and joy. It is *knowledge;* fountain of intellectual cultivation, which gives health to mankind, makes clear the vision, brings joy to his life, and breathes over his soul's destiny a deep repose. Go, and drink therefrom, thou whom fortune has not favored, and thou wilt soon find thyself rich! Thou mayst go forth into the world, and find thyself every where at home; thou canst cultivate in thy own little chamber; thy friends are ever around thee, and carry on wise conversations with thee; nature, antiquity, heaven, are accessible to thee! The industrious kingdom of the ant, the works of man, and rainbow, and music records, offer to thy soul hospitality. — *Frederika Bremer.*

SIMPLE REMEDY. — The simple application for a horse's feet which are brittle, or hoof bound, I learned from an English shoer; and having tried it with good effect, and never having seen it fail, I send it to you to be used as you may deem proper.

Mix equal parts of tar and some soft grease, having the foot clean and dry; apply it hot, but not boiling, to all parts, letting it run under the shoe as much as possible. In bad cases, the application should be made every day for a week, and then two or three times a week, till the foot becomes strong and smooth.

MEANS TO ENDS. — It is a curious fact, that the constituent elements of several grains are varied to the wants which they supply in the different latitudes where they are cultivated. Indian corn, which at its northern limit abounds largely in oil and sugar, especially needed there to sustain the animal heat of its consumers, becomes near the tropics almost wholly composed of starch, and suited to the demands of the constitution for lighter nutriment.

NOTICES OF PUBLICATIONS.

Western Horticultural Review. — This is a monthly journal, in a neat pamphlet form, at $3 per annum. Dr. John A. Warden, editor and publisher. — It is a new work, very ably conducted. The number before us is well filled with valuable matter. We hail with pleasure a permanent work from the Great West, which will embody the many valuable facts in horticulture that are developed among the intelligent and enterprising cultivators of that fertile region. We want No. 1.

Hygiene and Hydropathy. — This work embraces three lectures on these subjects, by Dr. Roland S. Houghton. New York: Fowlers & Wells. Mail edition, price 25 cents. — Many a person that is lingering with illness, and taking medicines with no avail, would receive essential benefit by judicious treatment in regard to diet and the simple use of water.

Accidents and Emergencies; a Guide containing Directions for Treatment in Bleeding, Cuts, Stabs, Bruises, Sprains, Ruptures, Broken Bones, Dislocations, Burns, Scalds, Explosions, Inflammations, Cholera, Choking, Poisons, Fits, Sunstroke, Lightning, Drowning, &c., &c. By Alfred Smee, F. R. S. With Alterations and Corrections, by Dr. Trall. — New York: Fowlers & Wells. Mail edition, price 12½ cents. — This work contains much valuable matter in a small space.

ACKNOWLEDGMENTS.

From John S. Wells, Exeter, N. H., Calef Sweeting apple. This fruit is large; flat; yellow ground, with numerous large specks of a greenish brown, and a reddish brown blush; stem rather slender and short, in a very deep and very broad cavity; calyx small, closed, in a broad, shallow basin; flesh white, rather firm, of a sweet, rich, pleasant flavor, tolerably good for the dessert, and first rate for baking. Late fall and early winter. This is a noble, handsome fruit, and one of the best sweet apples baked that we ever tasted, and the texture is just right for this purpose, as it cooks soft, and yet preserves its form. If the habits of this apple, such as growth, bearing, general fairness, &c., are favorable, it is worthy of general culture.

Of Charles H. Pendleton, Pendleton Hill, Ct., several varieties of pleasant apples; but as they received hard usage on the way, and some of them are past their prime, we cannot judge of their quality.

THE BEES AND THE DRONES.

BY W. A. KENTISH.

Some Combs of Honey 'mid some trees,
Belonging to a swarm of Bees,
Were, by a swarm of many a Drone,
Laid claim to, absolutely, as their own!

The case 'fore Justice Wasp was laid,
Who was a magistrate by trade,
And so had seen much trick and quirk,
Chicanery, and dirty work!

E'en he was puzzled what to do;
The case was intricate and new;
For all the witnesses deposed,
That they'd seen little animals, with wings,
Buzzing busily about the things;
And they all further, too, disclosed
That they were shaped and brown, like Bees!
But then, the difficulty was,
That all the Drones, in the same cause,
Were similar, in all respects, to these!

The Wasp the difficulty fairly owned,
And his decision he postponed
Until more testimony could be heard,
Than what had hitherto appeared.

He was conscientious in a doubtful case,
The very Draco of his race!
And as he found the thing so nice,
He begged some neighboring Ant's advice.
For, as they are famed for wise foresight,
He knew that they'd direct him right.
But these were just as much in doubt
How they should make the matter out!

At length, a Bee, for wisdom famed,
The attention of th' assembly claimed,
Who said, "The case had occupied the court
Now several months;
And that, to every appearance,
It wouldn't to an end so soon be brought.
Day after day it had been toiling,
Whilst all the honey-combs were spoiling!
Let the disputants work, and soon
The truth will easily be known,
And then your worship too will see
Who made the honey, they or we!"

To this, 't may be supposed, of course,
The Drones were, every one, adverse!
The Justice saw the case, with ease,
And gave a judgment to the Bees!

Instead of codes, if common sense
Were to be consulted in each cause,
And not the quibbling on laws,
'Twould save much time and much expense
It is unjust to have to pay
For such prolonged chicanery!

"Justice is drawn with even scales:"
This, in reality, is all a fudge!
For what with Counsel, reference, and Judge,
One side so frequently prevails,
It often takes the whole estate,
Before the beam's brought really *straight!*

— *Journal of Commerce.*

TERMS. — The New England Farmer is published every other Saturday, making a neat and handsome volume, at the close of the year, of 416 pages, at $1 a year, or five copies for $4, payable in advance. It may be elegantly bound in muslin, embossed and gilt, at 25 cents a volume, if left at this office. As it is stereotyped, back numbers can be furnished to new subscribers.

The Postage

On this paper is only 1 cent, or 26 cents a year, within the state, or within 100 miles out of the state; and 1½ cents, or 39 cents a year, beyond those distances.

STEREOTYPED AT THE
BOSTON STEREOTYPE FOUNDRY.